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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,096	07/19/2001	Roberto Ponticelli	38146	7387
29569	7590	09/20/2004	EXAMINER	
JEFFREY FURR 253 N. MAIN STREET JOHNSTOWN, OH 43031			GOLD, AVI M	
			ART UNIT	PAPER NUMBER
			2157	
DATE MAILED: 09/20/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/682,096

Applicant(s)

PONTICELLI, ROBERTO

Examiner

Avi Gold

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 1-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16 and 19-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment received on June 4, 2004 has been entered and fully considered.

Response to Amendment

Claim Objections

2. Claim 16 objected to because of the following informalities: Claim 16 is canceled in amendment and then used as a dependent claim to new claim 21. Examiner will treat it as if claim 1 was not canceled. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gridley, U.S. Patent No. 6,522,656 further in view of Tipley, U.S. Patent No. 5,533,204.

Gridley teaches the invention as claimed including distributed processing Ethernet switch with adaptive cut-through switching (see abstract).

As to claim 19, Gridley teaches a method for the generation and processing of signaling necessary to transmit information through a network, the method comprising the steps of:

Using a bus to transmit data on the network (col. 2, line 14-21, Gridley discloses a packet switching system);

Having a plurality of devices on the bus (col. 3, lines 14-21, Gridley discloses a plurality of ports; col. 5, lines 26-31, Gridley discloses devices being attached to ports);

Using a bus arbitration device to control conflict of data transmissions on the bus (col. 3, lines 64-66, Gridley discloses an arbiter to avoid data collisions);

Having the data be encapsulated in packets with the packets having the following fields, an address field, a command field and a bi-directional data field (col. 2, lines 22-24, Gridley discloses packets with destination addresses; col. 1, lines 22-26, Gridley discloses a packet having a specific function; col. 2, lines 41-44, Gridley discloses packets being received and sent); and

Having a plurality of the devices with the ability to serve as a master device as well as a slave device (col. 1, lines 40-45, Gridley discloses any LAN card receiving and sending a packet; col. 1, lines 30-32, Gridley discloses a LAN card being referred to as a device).

Gridley fails to teach the limitation further including having a master device that sends a data packet through the bus to a slave device, an acknowledge bit that is sent to the master device from the slave device for each received byte, and said data packet

containing the address of the destination device; having a slave device generate and send an acknowledge to the master device; and adding a new device on said network by setting the new device as a slave device; and resetting the new device as a master device if the new device needs to send data.

However, Tipley teaches a split transaction protocol for the peripheral component interconnect bus using only one sideband signal (see abstract). Tipley teaches the use of an acknowledge bit sent from the slave device to the master device (col. 5, lines 48-54). Tipley also teaches the following steps on the addition of a new device on the network: setting the new device as a slave device (col. 5, lines 16-27, Tipley discloses new devices added to the bus as slaves); and resetting the new device as a master device if the new device needs to send data (col. 5, lines 16-27, Tipley discloses a device receiving a grant signal to become a master and take control of the PCI bus).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gridley in view of Tipley to use an acknowledge bit and to set a new device as a slave device and resetting the new device as a master device if the new device needs to send data. One would be motivated to do so because an acknowledge bit would let the master device know that the slave device received the packet which would help avoid future problems and it would allow any device to send data to any other device.

As to claim 20, Gridley teaches the method of claim 19.

Gridley fails to teach the limitation further including waiting a period of time if the bus is not free and repeat checking the bus arbitration for availability of the bus until the data is sent.

However, Tipley teaches the waiting a period of time if the bus is not free and repeat checking the bus arbitration for availability of the bus until the data is sent (col. 2, lines 23-30, Tipley discloses a retry of sending data until the bus is available).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gridley in view of Tipley to set a waiting a period of time if the bus is not free and repeat checking the bus arbitration for availability of the bus until the data is sent. One would be motivated to do so because this would make sure that data that needs to be sent would be.

As to claim 21, Gridley teaches a network comprising:

A bus to transmit data on the network (col. 2, line 14-21, Gridley discloses a packet switching system);

A plurality of devices on the bus (col. 3, lines 14-21, Gridley discloses a plurality of ports; col. 5, lines 26-31, Gridley discloses devices being attached to ports);

A bus arbitration device to control conflict of data transmissions on the bus (col. 3, lines 64-66, Gridley discloses an arbiter to avoid data collisions);

Data that is encapsulated in packets with the packets having the following fields, an address field, a command field and a bi-directional data field (col. 2, lines 22-24, Gridley discloses packets with destination addresses; col.1, lines 22-26, Gridley

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discloses a packet having a specific function; col. 2, lines 41-44, Gridley discloses packets being received and sent) where said packets consists of an address field, a command field, a data field and an error correction field (col. 2, lines 22-24; col. 1, lines 22-26; col. 2, lines 41-44; col. 2, lines 52-54; Gridley discloses check sum information contained in packets);

A plurality of the devices with the ability to serve as a master device as well as a slave device (col. 1, lines 40-45, Gridley discloses any LAN card receiving and sending a packet; col. 1, lines 30-32, Gridley discloses a LAN card being referred to as a device);

where a device that switches to a master device; and

having the rest of the plurality of devices on the bus set as slave devices (col. 1, lines 40-45; col. 1, lines 30-32).

Gridley fails to teach the limitation further including the use of an acknowledge bit sent from the slave device to the master device.

However, Tipley teaches the use of an acknowledge bit sent from the slave device to the master device (col. 5, lines 48-54).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gridley in view of Tipley to use an acknowledge bit. One would be motivated to do so because an acknowledge bit would let the master device know that the slave device received the packet which would help avoid future problems.

Claim 16 does not teach or define any new limitations above claim 21 and therefore is rejected for similar reasons.

As to claim 22, Gridley teaches the method of claim 21.

Gridley fails to teach the limitation further including the network of claim 21 which comprises a new device which is set as a slave device and is reset to a master device if the new device needs to send data.

However, Tipley teaches the following steps on the addition of a new device on the network: setting the new device as a slave device (col. 5, lines 16-27, Tipley discloses new devices added to the bus as slaves); and resetting the new device as a master device if the new device needs to send data (col. 5, lines 16-27, Tipley discloses a device receiving a grant signal to become a master and take control of the PCI bus).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gridley in view of Tipley to setting a new device as a slave device and resetting the new device as a master device if the new device needs to send data. One would be motivated to do so because this would allow any device to send data to any other device.

As to claim 23, Gridley teaches the method of claim 21.

Gridley fails to teach the limitation further including waiting a period of time if the bus is not free and repeat checking the bus arbitration for availability of the bus until the data is sent.

However, Tipley teaches the waiting a period of time if the bus is not free and repeat checking the bus arbitration for availability of the bus until the data is sent (col. 2, lines 23-30, Tipley discloses a retry of sending data until the bus is available).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gridley in view of Tipley to set a waiting a period of time if the bus is not free and repeat checking the bus arbitration for availability of the bus until the data is sent. One would be motivated to do so because this would make sure that data that needs to be sent would be.

Response to Arguments

5. Applicant's arguments filed June 4, 2004 have been fully considered but they are not persuasive. Applicant did not discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,178,462 to Bass et al.

U.S. Pat. No. 5,564,025 to De Freese et al.

U.S. Pat. No. 6,484,225 to Sheikh et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avi Gold whose telephone number is 703-305-8762.

The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 703-308-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Avi Gold
Patent Examiner
Art Unit 2157



SALEH NAJJAR
PRIMARY EXAMINER

AMG